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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/512,581B

DATE: 02/10/2003

TIME: 15:10:37

Input Set : A:\seqlistcorrected3.txt

Output Set: N:\CRF4\02102003\I512581B.raw

21

3 <110> APPLICANT: Soto, Ana M.
 4 Sonnenschein, Carlos
 5 Geck, Peter
 6 Szelei, Jozsef
 8 <120> TITLE OF INVENTION: A NOVEL ANDROGEN-INDUCED SUPPRESSOR OF CELL
 9 PROLIFERATION AND USES THEREOF
 11 <130> FILE REFERENCE: MBI-008
 13 <140> CURRENT APPLICATION NUMBER: US 09/512,581B
 14 <141> CURRENT FILING DATE: 2000-02-24
 16 <150> PRIOR APPLICATION NUMBER: US 60/121,461
 17 <151> PRIOR FILING DATE: 1999-02-24
 19 <160> NUMBER OF SEQ ID NOS: 8
 21 <170> SOFTWARE: PatentIn Ver. 2.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 5271
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Homo sapiens
 28 <220> FEATURE:
 29 <221> NAME/KEY: CDS
 30 <222> LOCATION: (66)..(4238)
 32 <400> SEQUENCE: 1
 33 ccggagagcc ccggagttagcg agtcggcaac ccggagggtt agaaatattt 60
 35 ctgtc atg gct cat tca aag act agg acc aat gat gga aaa att aca tat 110
 36 Met Ala His Ser Lys Thr Arg Thr Asn Asp Gly Lys Ile Thr Tyr
 37 1 5 10 15
 39 ccg cct ggg gtc aag gaa ata tca gat aaa ata tct aaa gag gag atg 158
 40 Pro Pro Gly Val Lys Glu Ile Ser Asp Lys Ile Ser Lys Glu Glu Met
 41 20 25 30
 43 gtg aga cga tta aag atg gtt gtg aaa act ttt atg gat atg gac cag 206
 44 Val Arg Arg Leu Lys Met Val Val Lys Thr Phe Met Asp Met Asp Gln
 45 35 40 45
 47 gac tct gaa gaa aag gag ctt tat tta aac cta gct tta cat ctt 254
 48 Asp Ser Glu Glu Lys Glu Leu Tyr Leu Asn Leu Ala Leu His Leu
 49 50 55 60
 51 gct tca gat ttt ttt ctc aag cat cct ggt aaa gat gtt cgc tta ctg 302
 52 Ala Ser Asp Phe Phe Leu Lys His Pro Gly Lys Asp Val Arg Leu Leu
 53 65 70 75
 55 gta gcc tgc tgc ctt gct gat att ttc agg att tat gct cct gaa gct 350
 56 Val Ala Cys Cys Leu Ala Asp Ile Phe Arg Ile Tyr Ala Pro Glu Ala
 57 80 85 90 95
 59 cct tac aca tcc cct gat aaa cta aag gat ata ttt atg ttt ata aca 398
 60 Pro Tyr Thr Ser Pro Asp Lys Leu Lys Asp Ile Phe Met Phe Ile Thr
 61 100 105 110

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| | | | | | | |
|-----|-----------------|-----------------|-------------|-------------|-----------------|-------------|
| 63 | aga cag ttg aag | ggg cta gag gat | aca aag | agc cca caa | ttc aat agg | 446 |
| 64 | Arg Gln Leu | Lys Gly Leu | Glu Asp | Thr Lys Ser | Pro Gln Phe Asn | Arg |
| 65 | 115 | 120 | | | 125 | |
| 67 | tat ttt tat | tta ctt gag aac | att gct tgg | gtc aag tca | tat aac ata | 494 |
| 68 | Tyr Phe Tyr | Leu Leu Glu | Asn Ile Ala | Trp Val Lys | Ser Tyr Asn | Ile |
| 69 | 130 | 135 | | | 140 | |
| 71 | tgc ttt gag | tta gaa gat | agc aat gaa | att ttc acc | agc cta tac | 542 |
| 72 | Cys Phe Glu | Leu Glu Asp | Ser Asn Glu | Ilé Phe Thr | Gln Leu Tyr | Arg |
| 73 | 145 | 150 | | | 155 | |
| 75 | acc tta ttt | tca gtt ata aac | aat ggc cac | aat cag aaa | gtc cat atg | 590 |
| 76 | Thr Leu Phe | Ser Val Ile | Asn Asn Gly | His Asn Gln | Lys Val His | Met |
| 77 | 160 | 165 | | | 170 | 175 |
| 79 | cac atg gta | gac ctt atg | agc tct att | att tgt gaa | ggt gat aca | 638 |
| 80 | His Met Val | Asp Leu Met | Ser Ser Ile | Ile Cys Glu | Gly Asp Thr | Val |
| 81 | 180 | 185 | | | 190 | |
| 83 | tct cag gag | ctt ttg gat | acg gtt tta | gta aat ctg | gtc cct gct | 686 |
| 84 | Ser Gln Glu | Leu Leu Asp | Thr Val | Leu Val Asn | Leu Val Pro | Ala His |
| 85 | 195 | 200 | | | 205 | |
| 87 | aag aat tta | aac aag caa | gca tat | gat ttg | gca aag gct | 734 |
| 88 | Lys Asn Leu | Asn Lys Gln | Ala Tyr | Asp Leu Ala | Lys Ala Leu | Leu Lys |
| 89 | 210 | 215 | | | 220 | |
| 91 | agg aca | gct caa | gct att | gag cca | tat att acc | 782 |
| 92 | Arg Thr Ala | Gln Ala Ile | Glu Pro | Tyr Ile | Thr Thr Phe | Asn Gln |
| 93 | 225 | 230 | | | 235 | |
| 95 | gtt .ctg atg | ctt ggg aaa | aca tct atc | agc gat | ttg tca gag | 830 |
| 96 | Val Leu Met | Leu Gly Lys | Thr Ser Ile | Ser Asp Leu | Ser Glu His | Val |
| 97 | 240 | 245 | | | 250 | 255 |
| 99 | ttt gac tta | att ttg gag | ctc tac aat | att gat | agt cat ttg | 878 |
| 100 | Phe Asp Leu | Ile Leu Glu | Leu Tyr | Asn Ile Asp | Ser His Leu | Leu |
| 101 | 260 | 265 | | | 270 | |
| 103 | tct gtt tta | ccc cag | ctt gaa | ttt aaa | tta aag | 926 |
| 104 | Ser Val Leu | Pro Gln Leu | Glu Phe | Lys Leu | Lys Ser Asn | Asn Glu |
| 105 | 275 | 280 | | | 285 | |
| 107 | gag cgc cta | caa gtt | aaa cta | ctg gca | aaa atg | 974 |
| 108 | Glu Arg Leu | Gln Val Val | Lys Leu | Leu Ala | Lys Met Phe | Gly Ala Lys |
| 109 | 290 | 295 | | | 300 | |
| 111 | gat tca gaa | ttg gct | tct caa | aac aag | cca ctt | 1022 |
| 112 | Asp Ser Glu | Leu Ala Ser | Gln Asn | Lys Pro | Leu Trp | Gln Cys Tyr |
| 113 | 305 | 310 | | | 315 | |
| 115 | ggc agg ttt | aat gat | atc cat | gta cca | atc cgc | 1070 |
| 116 | Gly Arg Phe | Asn Asp Ile | His Val | Pro Ile | Arg Leu | Glu Cys Val |
| 117 | 320 | 325 | | | 330 | 335 |
| 119 | ttt gct | agc cat | tgt ctc | atg aac | cat cct | 1118 |
| 120 | Phe Ala Ser | His Cys Leu | Met Asn | His Pro | Asp Leu | Ala Lys Asp |
| 121 | 340 | 345 | | | 350 | |
| 123 | aca gag tat | ctt aaa | gtg agg | tca cat | gac cct | 1166 |
| 124 | Thr Glu Tyr | Leu Lys Val | Arg Ser | His Asp | Pro Glu | Ala Ile Arg |
| 125 | 355 | 360 | | | 365 | |
| 127 | cat gat | gtt att | gtg tca | ata gtt | aca gct | 1214 |
| | | | | | aaa aag | gat att ctt |

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 128 | His | Asp | Val | Ile | Val | Ser | Ile | Val | Thr | Ala | Ala | Lys | Lys | Asp | Ile | Leu | |
| 129 | | 370 | | | 375 | | | | | | | 380 | | | | | |
| 131 | ctg | gtc | aat | gat | cac | tta | ctt | aat | ttt | gtg | aga | gag | aga | aca | tta | gac | 1262 |
| 132 | Leu | Val | Asn | Asp | His | Leu | Leu | Asn | Phe | Val | Arg | Glu | Arg | Thr | Leu | Asp | |
| 133 | | | | | 385 | | | | 390 | | | 395 | | | | | |
| 135 | aaa | cga | tgg | aga | gta | cgc | aaa | gaa | gcc | atg | atg | gga | ctt | gcc | caa | att | 1310 |
| 136 | Lys | Arg | Trp | Arg | Val | Arg | Lys | Glu | Ala | Met | Met | Gly | Leu | Ala | Gln | Ile | |
| 137 | 400 | | | | | 405 | | | | 410 | | | 415 | | | | |
| 139 | tat | aag | aaa | tat | gct | tta | cag | tca | gca | gct | gga | aaa | gat | gct | gca | aaa | 1358 |
| 140 | Tyr | Lys | Tyr | Ala | Leu | Gln | Ser | Ala | Ala | Gly | Lys | Asp | Ala | Ala | Lys | | |
| 141 | | | | | 420 | | | | 425 | | | 430 | | | | | |
| 143 | cag | ata | gca | tgg | atc | aaa | gac | aaa | ttg | cta | cat | ata | tat | tat | caa | aat | 1406 |
| 144 | Gln | Ile | Ala | Trp | Ile | Lys | Asp | Lys | Leu | Leu | His | Ile | Tyr | Tyr | Gln | Asn | |
| 145 | | | | | 435 | | | | 440 | | | 445 | | | | | |
| 147 | agt | att | gat | gat | cga | cta | ctt | gtt | gaa | cgg | atc | ttt | gct | caa | tac | atg | 1454 |
| 148 | Ser | Ile | Asp | Asp | Arg | Leu | Leu | Val | Glu | Arg | Ile | Phe | Ala | Gln | Tyr | Met | |
| 149 | | | | | 450 | | | | 455 | | | 460 | | | | | |
| 151 | gtt | cct | cac | aat | tta | gaa | act | aca | gaa | cgg | atg | aaa | tgc | tta | tat | tac | 1502 |
| 152 | Val | Pro | His | Asn | Leu | Glu | Thr | Thr | Glu | Arg | Met | Lys | Cys | Leu | Tyr | Tyr | |
| 153 | | | | | 465 | | | | 470 | | | 475 | | | | | |
| 155 | ttg | tat | gcc | aca | ctg | gat | tta | aat | gct | gtg | aaa | gca | ttg | aat | gaa | atg | 1550 |
| 156 | Leu | Tyr | Ala | Thr | Leu | Asp | Leu | Asn | Ala | Val | Lys | Ala | Leu | Asn | Glu | Met | |
| 157 | 480 | | | | | 485 | | | | 490 | | | 495 | | | | |
| 159 | tgg | aaa | tgt | caa | aat | ctg | ctc | cga | cat | caa | gta | aag | gat | ttg | ctt | gac | 1598 |
| 160 | Trp | Lys | Cys | Gln | Asn | Leu | Leu | Arg | His | Gln | Val | Lys | Asp | Leu | Leu | Asp | |
| 161 | | | | | 500 | | | | 505 | | | 510 | | | | | |
| 163 | ttg | att | aag | caa | ccc | aaa | aca | gat | gcc | agt | gtc | aag | gcc | ata | ttt | tca | 1646 |
| 164 | Leu | Ile | Lys | Gln | Pro | Lys | Thr | Asp | Ala | Ser | Val | Lys | Ala | Ile | Phe | Ser | |
| 165 | | | | | 515 | | | | 520 | | | 525 | | | | | |
| 167 | aaa | gtg | atg | gtt | att | aca | aga | aat | tta | cct | gat | cct | ggt | aag | gct | cag | 1694 |
| 168 | Lys | Val | Met | Val | Ile | Thr | Arg | Asn | Leu | Pro | Asp | Pro | Gly | Lys | Ala | Gln | |
| 169 | | | | | 530 | | | | 535 | | | 540 | | | | | |
| 171 | gat | ttc | atg | aag | aaa | ttc | aca | cag | gtg | tta | gaa | gat | gat | gag | aaa | ata | 1742 |
| 172 | Asp | Phe | Met | Lys | Lys | Phe | Thr | Gln | Val | Leu | Glu | Asp | Asp | Glu | Lys | Ile | |
| 173 | | | | | 545 | | | | 550 | | | 555 | | | | | |
| 175 | aga | aag | cag | tta | gaa | gta | ctt | gtt | agt | cca | aca | tgc | tcc | tgc | aag | cag | 1790 |
| 176 | Arg | Lys | Gln | Leu | Glu | Val | Leu | Val | Ser | Pro | Thr | Cys | Ser | Cys | Lys | Gln | |
| 177 | 560 | | | | | 565 | | | | 570 | | | 575 | | | | |
| 179 | gct | gaa | ggt | tgt | gtg | cgt | gaa | ata | act | aag | aag | ttg | ggc | aac | ccc | aaa | 1838 |
| 180 | Ala | Glu | Gly | Cys | Val | Arg | Glu | Ile | Thr | Lys | Lys | Leu | Gly | Asn | Pro | Lys | |
| 181 | | | | | 580 | | | | 585 | | | 590 | | | | | |
| 183 | cag | cct | aca | aat | cct | ttc | ctg | gaa | atg | atc | aag | ttt | ctc | ttg | gag | agg | 1886 |
| 184 | Gln | Pro | Thr | Asn | Pro | Phe | Leu | Glu | Met | Ile | Lys | Phe | Leu | Leu | Glu | Arg | |
| 185 | | | | | 595 | | | | 600 | | | 605 | | | | | |
| 187 | ata | gca | cct | gtg | cac | ata | gat | acc | gaa | tct | atc | agt | gct | ttt | att | aaa | 1934 |
| 188 | Ile | Ala | Pro | Val | His | Ile | Asp | Thr | Glu | Ser | Ile | Ser | Ala | Leu | Ile | Lys | |
| 189 | | | | | 610 | | | | 615 | | | 620 | | | | | |
| 191 | caa | gtg | aac | aaa | tca | ata | gat | gga | aca | gca | gat | gat | gaa | gat | gag | ggt | 1982 |
| 192 | Gln | Val | Asn | Lys | Ser | Ile | Asp | Gly | Thr | Ala | Asp | Asp | Glu | Asp | Glu | Gly | |

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| | | | | |
|-----|---|------|-----|-----|
| 193 | 625 | 630 | 635 | |
| 195 | gtt cca act gat caa gcc atc aga gca ggt ctt gaa ctg ctt aag gta | 2030 | | |
| 196 | Val Pro Thr Asp Gln Ala Ile Arg Ala Gly Leu Glu Leu Leu Lys Val | | | |
| 197 | 640 | 645 | 650 | 655 |
| 199 | ctc tca ttt aca cat ccc atc tca ttt cat tct gct gaa aca ttt gaa | 2078 | | |
| 200 | Leu Ser Phe Thr His Pro Ile Ser Phe His Ser Ala Glu Thr Phe Glu | | | |
| 201 | 660 | 665 | 670 | |
| 203 | tca tta ctg gct tgt ctg aaa atg gat gat gaa aaa gta gca gaa gct | 2126 | | |
| 204 | Ser Leu Leu Ala Cys Leu Lys Met Asp Asp Glu Lys Val Ala Glu Ala | | | |
| 205 | 675 | 680 | 685 | |
| 207 | gca cta caa att ttc aaa aac aca gga agc aaa att gaa gag gat ttt | 2174 | | |
| 208 | Ala Leu Gln Ile Phe Lys Asn Thr Gly Ser Lys Ile Glu Glu Asp Phe | | | |
| 209 | 690 | 695 | 700 | |
| 211 | cca cac atc aga tca gcc ttg ctt cct gtt tta cat cac aaa tct aaa | 2222 | | |
| 212 | Pro His Ile Arg Ser Ala Leu Leu Pro Val Leu His His Lys Ser Lys | | | |
| 213 | 705 | 710 | 715 | |
| 215 | aaa gga ccc ccc cgt caa gcc aaa tat gcc att cat tgt atc cat gcg | 2270 | | |
| 216 | Lys Gly Pro Pro Arg Gln Ala Lys Tyr Ala Ile His Cys Ile His Ala | | | |
| 217 | 720 | 725 | 730 | 735 |
| 219 | ata ttt tct agt aaa gag acc cag ttt gca cag ata ttt gag cct ctg | 2318 | | |
| 220 | Ile Phe Ser Ser Lys Glu Thr Gln Phe Ala Gln Ile Phe Glu Pro Leu | | | |
| 221 | 740 | 745 | 750 | |
| 223 | cat aag agc cta gat cca agc aac ctg gaa cat ctc ata aca cca ttg | 2366 | | |
| 224 | His Lys Ser Leu Asp Pro Ser Asn Leu Glu His Leu Ile Thr Pro Leu | | | |
| 225 | 755 | 760 | 765 | |
| 227 | gtt act att ggt cat att gct ctc ctt gca cct gat caa ttt gct gct | 2414 | | |
| 228 | Val Thr Ile Gly His Ile Ala Leu Leu Ala Pro Asp Gln Phe Ala Ala | | | |
| 229 | 770 | 775 | 780 | |
| 231 | cct tgg aaa tct tgg gta gct act ttc att gtg aaa gat ctt ctc atg | 2462 | | |
| 232 | Pro Trp Lys Ser Trp Val Ala Thr Phe Ile Val Lys Asp Leu Leu Met | | | |
| 233 | 785 | 790 | 795 | |
| 235 | aat gat cgg ctt cca ggg aaa aag aca act aaa ctt tgg gtt cca gat | 2510 | | |
| 236 | Asn Asp Arg Leu Pro Gly Lys Lys Thr Thr Lys Leu Trp Val Pro Asp | | | |
| 237 | 800 | 805 | 810 | 815 |
| 239 | gaa gaa gta tct cct gag aca atg gtc aaa att cag gct att aaa atg | 2558 | | |
| 240 | Glu Glu Val Ser Pro Glu Thr Met Val Lys Ile Gln Ala Ile Lys Met | | | |
| 241 | 820 | 825 | 830 | |
| 243 | atg gtt cga tgg cta ctt gga atg aaa aat aat cac agt aaa tca gga | 2606 | | |
| 244 | Met Val Arg Trp Leu Leu Gly Met Lys Asn Asn His Ser Lys Ser Gly | | | |
| 245 | 835 | 840 | 845 | |
| 247 | act tct acc tta aga ttg cta aca aca ata ttg cat agt gat gga gac | 2654 | | |
| 248 | Thr Ser Thr Leu Arg Leu Leu Thr Thr Ile Leu His Ser Asp Gly Asp | | | |
| 249 | 850 | 855 | 860 | |
| 251 | ttg aca gaa cag ggg aaa att agt aaa cca gat atg tca cgt ctg aga | 2702 | | |
| 252 | Leu Thr Glu Gln Gly Lys Ile Ser Lys Pro Asp Met Ser Arg Leu Arg | | | |
| 253 | 865 | 870 | 875 | |
| 255 | ctt gct gct ggg agt gct att gtg aag ctg gca caa gaa ccc tgt tac | 2750 | | |
| 256 | Leu Ala Ala Gly Ser Ala Ile Val Lys Leu Ala Gln Glu Pro Cys Tyr | | | |
| 257 | 880 | 885 | 890 | 895 |

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| | |
|---|------|
| 259 cat gaa atc atc aca tta gaa caa tat cag cta tgt gca tta gct atc | 2798 |
| 260 His Glu Ile Ile Thr Leu Glu Gln Tyr Gln Leu Cys Ala Leu Ala Ile | |
| 261 900 905 910 | |
| 263 aac gat gaa tgc tat caa gta aga caa gtg ttt gcc cag aaa ctt cac | 2846 |
| 264 Asn Asp Glu Cys Tyr Gln Val Arg Gln Val Phe Ala Gln Lys Leu His | |
| 265 915 920 925 | |
| 267 aaa ggc ctt tcc cgt tta cgg ctt cca ctt gag tat atg gca atc tgt | 2894 |
| 268 Lys Gly Leu Ser Arg Leu Arg Leu Pro Leu Glu Tyr Met Ala Ile Cys | |
| 269 930 935 940 | |
| 271 gcc ctt tgt gca aaa gat cct gta aag gag aga aga gct cat gct agg | 2942 |
| 272 Ala Leu Cys Ala Lys Asp Pro Val Lys Glu Arg Arg Ala His Ala Arg | |
| 273 945 950 955 | |
| 275 caa tgt ttg gtg aaa aat ata aat gta agg cgg gag tat ctg aag cag | 2990 |
| 276 Gln Cys Leu Val Lys Asn Ile Asn Val Arg Arg Glu Tyr Leu Lys Gln | |
| 277 960 965 970 975 | |
| 279 cat gca gct gtt agt gaa aaa tta ttg tct ctt cta cca gag tat gtt | 3038 |
| 280 His Ala Ala Val Ser Glu Lys Leu Leu Ser Leu Leu Pro Glu Tyr Val | |
| 281 980 985 990 | |
| 283 gtt cca tat aca att cac ctt ttg gca cat gac cca gat tat gtc aaa | 3086 |
| 284 Val Pro Tyr Thr Ile His Leu Leu Ala His Asp Pro Asp Tyr Val Lys | |
| 285 995 1000 1005 | |
| 287 gta cag gat att gaa caa ctt aaa gat gtt aaa gaa tgt ctt tgg ttt | 3134 |
| 288 Val Gln Asp Ile Glu Gln Leu Lys Asp Val Lys Glu Cys Leu Trp Phe | |
| 289 1010 1015 1020 | |
| 291 gtt ctg gaa ata tta atg gct aaa aat gaa aat aac agt cac gct ttt | 3182 |
| 292 Val Leu Glu Ile Leu Met Ala Lys Asn Glu Asn Asn Ser His Ala Phe | |
| 293 1025 1030 1035 | |
| 295 atc aga aag atg gta gaa aat att aaa caa aca aaa gat gcc caa gga | 3230 |
| 296 Ile Arg Lys Met Val Glu Asn Ile Lys Gln Thr Lys Asp Ala Gln Gly | |
| 297 1040 1045 1050 1055 | |
| 299 cca gat gat gca aaa atg aat gaa aaa ctg tac act gtg tgt gat gtt | 3278 |
| 300 Pro Asp Asp Ala Lys Met Asn Glu Lys Leu Tyr Thr Val Cys Asp Val | |
| 301 1060 1065 1070 | |
| 303 gcc atg aat atc atc atg tca aag agt act aca tac agt ttg gaa tct | 3326 |
| 304 Ala Met Asn Ile Ile Met Ser Lys Ser Thr Thr Tyr Ser Leu Glu Ser | |
| 305 1075 1080 1085 | |
| 307 cct aaa gac ccg gta cta cca gct cgt ttc ttc act caa cct gac aag | 3374 |
| 308 Pro Lys Asp Pro Val Leu Pro Ala Arg Phe Phe Thr Gln Pro Asp Lys | |
| 309 1090 1095 1100 | |
| 311 aat ttc agt aac acc aaa aat tat ctg cct cct gaa atg aaa tca ttt | 3422 |
| 312 Asn Phe Ser Asn Thr Lys Asn Tyr Leu Pro Pro Glu Met Lys Ser Phe | |
| 313 1105 1110 1115 | |
| 315 ttc act cct gga aaa cct aaa aca acc aat gtt cta gga gct gtt aac | 3470 |
| 316 Phe Thr Pro Gly Lys Pro Lys Thr Thr Asn Val Leu Gly Ala Val Asn | |
| 317 1120 1125 1130 1135 | |
| 319 aag cca ctt tca tca gca ggc aag caa tct cag acc aaa tca tca cga | 3518 |
| 320 Lys Pro Leu Ser Ser Ala Gly Lys Gln Ser Gln Thr Lys Ser Ser Arg | |
| 321 1140 1145 1150 | |
| 323 atg gaa act gta agc aat gca agc agc agc tca aat cca agc tct cct | 3566 |

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/512,581BDATE: 02/10/2003
TIME: 15:10:38Input Set : A:\seqlistcorrected3.txt
Output Set: N:\CRF4\02102003\I512581B.rawInvalid Line Length:

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Seq#:1; Line(s) 303,304,305,306,307,308,309,310,311,312,313,314,315,316,317
Seq#:1; Line(s) 318,319,320,321,322,323,324,325,326,327,328,329,330,331,332
Seq#:1; Line(s) 333,334,335,336,337,338,339,340,341,342,343,344,345,346,347
Seq#:1; Line(s) 348,349,350,351,352,353,354,355,356,357,358,359,360,361,362
Seq#:1; Line(s) 363,364,365,366,367,368,369,370,371,372,373,374,375,376,377
Seq#:1; Line(s) 378,379,380,381,382,383,384,385,386,387,388,389,390,391,392
Seq#:1; Line(s) 393,394,395,396,397,398,399,400,401,402,403,404,405,406,407
Seq#:1; Line(s) 408,409,410,411,412,413,414,415,416,417,418,419,421
Seq#:2; Line(s) 422,423,424,425,426,427,428,429,430,431,432,433,434,435,436
Seq#:2; Line(s) 437,438,439,440,441,442,443,444,445,446,447,448,449,450,451
Seq#:2; Line(s) 452,453,454,455,456,457,458,459,460,461,462,463,464,465,466
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Seq#:2; Line(s) 497,498,499,500,501,502,503,504,505,506,507,508,509,510,511
Seq#:2; Line(s) 512,513,514,515,516,517,518,519,520,521,522,523,524,525,526
Seq#:2; Line(s) 527,528,529,530,531,532,533,534,535,536,537,538,539,540,541
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Seq#:2; Line(s) 572,573,574,575,576,577,578,579,580,581,582,583,584,585,586
Seq#:2; Line(s) 587,588,589,590,591,592,593,594,595,596,597,598,599,600,601
Seq#:2; Line(s) 602,603,604,605,606,607,608,609,610,611,612,613,614,615,616
Seq#:2; Line(s) 617,618,619,620,621,622,623,624,625,626,627,628,629,630,631
Seq#:2; Line(s) 632,633,634,635,636,637,638,639,640,641,642,643,644,645,646
Seq#:2; Line(s) 647,648,649,650,651,652,653,654,655,656,657,658,659,660,661
Seq#:2; Line(s) 662,663,664,665,666,667,668,669,670,671,672,673,674,675,676

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/10/2003
PATENT APPLICATION: US/09/512,581B TIME: 15:10:38

Input Set : A:\seqlistcorrected3.txt
Output Set: N:\CRF4\02102003\I512581B.raw

Seq#:2; Line(s) 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689
Seq#:3; Line(s) 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704
Seq#:3; Line(s) 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719
Seq#:3; Line(s) 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734
Seq#:3; Line(s) 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749
Seq#:3; Line(s) 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764
Seq#:3; Line(s) 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779
Seq#:3; Line(s) 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794

VERIFICATION SUMMARY

PATENT APPLICATION: **US/09/512,581B**

DATE: 02/10/2003

TIME: 15:10:38

Input Set : **A:\seqlistcorrected3.txt**
Output Set: **N:\CRF4\02102003\I512581B.raw**

L:1838 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7